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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,465	03/01/2004	Takayoshi Yoshida	042151	9261

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EXAMINER	
ABDULSELAM, ABBAS I	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,465	YOSHIDA ET AL.	
	Examiner	Art Unit	
	Abbas I. Abdulselam	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14, 16 and 18-20* is/are rejected.

7)☐ Claim(s) *15 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/01/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14, 16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Velayudhan et al. (USPN 6803890).

Regarding claims 1 and 16,Velayudhan et al. (hereinafter = "Velayudhan") teaches a drive method for a light emitting display panel in which light emitting elements are connected at respective crossing points between a plurality of data lines and a plurality of scan lines so that the light emitting elements connected to the respective scan lines are sequentially selectively lighted by sequentially scanning the scan lines, (Fig. 7(scan pulse voltage, column drive), Fig. 7 (R1, Rn, C1, Cn, electrode row, electrode column), El display, Fig. 8, col. 5, lines 24-26 and col. 6, lines 1-6) wherein there is provided at least one of an intensity increase period in which a light emission intensity of the light emitting element is gradually increased allowing the light emission intensity to reach a constant intensity state within a predetermined period from a scan start in one scan period or an intensity decrease period in which the light emission intensity of the light emitting element is gradually decreased from the constant intensity state within a

predetermined period which is immediately before the completion of the scan period (Fig. 3 (A,B, C), positive Non-ramped Modulating Pulse, flat plateau, the rise time, the fall time, col. 2, lines 61-65 and col. 3, lines 46-54).

Regarding claim 2, Velayudhan teaches the value of current which is supplied to the light emitting element in the intensity increase period or the intensity decrease period and the value of current which is supplied to the light emitting element in the constant intensity state are set so that the both values of the currents are different from each other (when a pulse is present, it produces light output from the EL material that is proportional to the current flow across the EL material, col. 3, lines 51-53)).

Regarding claim 3, Velayudhan teaches the drive method for the light emitting display panel in which there is provided the intensity increase period in which a lighting intensity of the light emitting element is gradually increased allowing the lighting intensity to reach the constant intensity state within the predetermined period from the scan start in one scan period, wherein there is provided a set period in which the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period is set at a predetermined voltage value at a beginning of said scan period corresponding to one scan line so that drive current for holding the constant intensity state is given to the light emitting element within the intensity increase period (see Fig. 3, on the time axis corresponding to regions A, B, C, and col. 3, lines 51-53).

Regarding claim 4, Velayudhan teaches the drive method for the light emitting display panel in which there is provided the intensity increase period in which a lighting intensity of the light emitting element is gradually increased allowing the lighting intensity to reach the constant intensity state within the predetermined period from the scan start in one scan period, wherein there is provided a set period in which the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period is set at a predetermined voltage value immediately before a scan period corresponding to one scan line so that current which is different from drive current which is for holding the constant intensity state is given to the light emitting element within the intensity increase period (see Fig. 3, on the time axis corresponding to regions A, B, C and col. 3, lines 51-53).

Regarding claim 5, Velayudhan teaches the value of voltage which is applied to both ends of the light emitting element in the set period is set at a voltage value which does not reach the forward voltage of the light emitting element in the constant intensity state (see Fig. 3, on the time axis corresponding to regions A, B, C and col. 3, lines 51-53).

Regarding claims 6 and 18-20, the light emitting element is driven by a voltage source whose output voltage changes gradually in the intensity increase period or the intensity decrease period (see Fig. 8 (scan pulse voltage), Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C, col. 3, lines 51-53, when a pulse is present, it produces light output from the EL material that is proportional to the current flow across the EL material, col. 3, lines 51-53).

Regarding claim 7, Velayudhan teaches the applied voltage to the light emitting element at an end time of the intensity increase period or at a start time of the intensity decrease period is set at a voltage value which is approximately equal to the forward voltage of the light emitting element in the constant intensity state (see Fig. 8 (scan pulse voltage), Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C and col. 3, lines 51-53).

Regarding claim 8, Velayudhan teaches a light emitting element which emits different light emission colors is employed in the light emitting display panel (For a color EL, there will be three separate luminescent materials, one phosphor for each primary color--red, blue, and green. Examples of doped phosphors include CaS:Eu (red), SrS:Ce (blue-green), and ZnS:Tb (green). In addition, color filters may be used, col. 6, lines 1-7)).

Regarding claim 9, Velayudhan teaches light emitting element which emits different light emission colors is employed in the light emitting display panel (For a color EL, there will be three separate luminescent materials, one phosphor for each primary color--red, blue, and green. Examples of doped phosphors include CaS:Eu (red), SrS:Ce (blue-green), and ZnS:Tb (green). In addition, color filters may be used, col. 6, lines 1-7)).

Regarding claim 10, Velayudhan teaches a gradation expression is implemented through time gradation in which a light emission time of the light emitting element which includes at least either one of the intensity increase period or the intensity decrease period

is controlled (see Fig. 8 (scan pulse voltage), Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C and col. 3, lines 51-53, global brightness may be controlled by changing the amplitude of the modulating pulses, col. 5, lines 45-46).

Regarding claim 11, Velayudhan teaches gradation expression is implemented through time gradation in which a light emission time of the light emitting element which includes at least either one of the intensity increase period or the intensity decrease period is controlled (Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C and col. 3, lines 51-53, global brightness may be controlled by changing the amplitude of the modulating pulses, col. 5, lines 45-46).

Regarding claim 12, Velayudhan teaches a gradation expression is implemented through time gradation in which a light emission time of the light emitting element which includes at least either one of the intensity increase period or the intensity decrease period is controlled (Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C and col. 3, lines 51-53, global brightness may be controlled by changing the amplitude of the modulating pulses, col. 5, lines 45-46).

Regarding claim 13, Velayudhan teaches a gradation expression is implemented through time gradation in which a light emission time of the light emitting element which includes at least either one of the intensity increase period or the intensity decrease period is controlled (Fig. 3, on the time axis Vs. voltage corresponding to regions A, B, C and

col. 3, lines 51-53, global brightness may be controlled by changing the amplitude of the modulating pulses, col. 5, lines 45-46).

Allowable Subject Matter

3. Claims 15 and 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 7,086,771 to kawabata et al.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulselam whose telephone number is 7033058591. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-2727691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulselam

Examiner

Art Unit 2629

11/07/06

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600